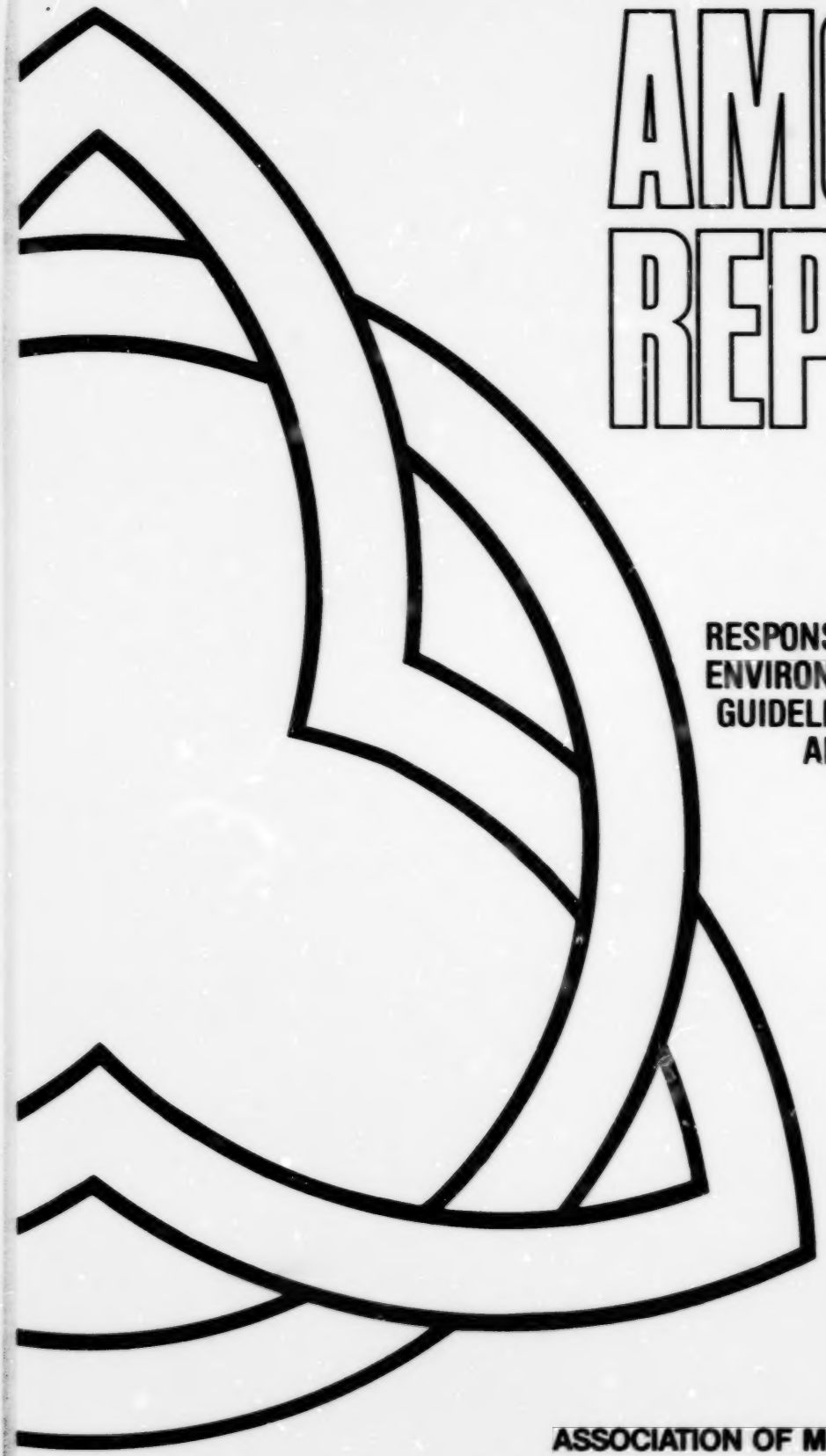

AMO REPORTS 83-11

RESPONSE TO A MINISTRY OF THE ENVIRONMENT DISCUSSION PAPER: GUIDELINES FOR THE REGULATION AND SITING OF MOBILE PCB DESTRUCTION FACILITIES

ASSOCIATION OF MUNICIPALITIES OF ONTARIO
MAY 1983

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ASSOCIATION OF MUNICIPALITIES OF ONTARIO

The Association of Municipalities of Ontario, a non-partisan voluntary organization, is united to promote the values of the municipal government system and the status of the municipal level of government as a vital and essential component of the total intergovernmental framework of Ontario and Canada.

The Association acts as the collective voice of Ontario's municipal governments and is organized to accomplish through cooperation and coordination, what the majority have neither the time nor the resources to do individually.

The Association represents some six hundred (600) municipal governments throughout Ontario. The governing body is composed of some eighty (80) municipal elected and appointed officials, who in turn represent a wide-range of municipal government interest.

The following sections and affiliated municipal professional associations form an important part of the Association's structure and therefore, play an important part in its activities in terms of the Board of Directors, program and policy development:

Association Sections:

* County and Regional Section
* Large Urban Section
* Northern Ontario Section (FONOM/NOMA)
* Rural (ROMA) Section
* Organization of Small Urban Municipalities Section

Association Affiliates:

* Association of Municipal Clerks and Treasurers of Ontario
* Association of Municipal Tax Collectors of Ontario
* Municipal Engineers Association
* Ontario Municipal Administrators Association
* Ontario Municipal Personnel Association
* Ontario Municipal Social Services Association
* Society of Directors of Municipal Recreation of Ontario

To the Municipal Clerk:

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"AMO Reports 83-11" was submitted to the Honourable Claude Bennett, Minister of Municipal Affairs and Housing and the Honourable Keith Norton, Minister of the Environment on June 6, 1983.

AMO RESPONSE TO A MINISTRY OF THE ENVIRONMENT DISCUSSION PAPER: GUIDELINES FOR THE REGULATION AND SITING OF MOBILE PCB DESTRUCTION FACILITIES

1. INTRODUCTION

In February, 1983 the Honourable Keith C. Norton, Q.C., Minister of the Environment, released a discussion paper which contained proposals for guidelines for the regulation and siting of mobile PCB destruction facilities. The Ministry discussion paper included a summary of current legislation and regulations that would pertain to the transportation, storage or disposal of PCBs. Further, it outlined an approval process for destruction facilities, proposed site selection criteria, and public participation process (re site selection), a defined operational criteria relative to materials handling, transportation, occupational health and safety, contingency plans and security, and site restoration measures.

2. AMO COMMENTS

2.1 Facility Approval

The discussion paper proposes the use of a mobile incineration facility for the destruction of PCBs. Further, it proposes that a single environmental assessment be undertaken to establish the methods to be employed within such a facility, the standards of operation and the siting criteria to be used.

The Association agrees that a full environmental assessment for each site at which a mobile destruction unit is to be located should not be necessary. The Association believes that a full environmental assessment should be held to establish the type of facility and methodology to be used for PCB destruction and to develop a set of guidelines for the siting of the facility and standards for the operation of the mobile facility.

The environmental assessment process which is undertaken must consider all alternatives in determining the type of facility to be employed. The discussion paper makes reference to incineration facilities only. The Association believes it is necessary to consider all available technologies in an attempt to determine which has the least risk of environmental damage associated

with it. This would include consideration of the liquid neutralization process proposed by Ontario Hydro and consideration of any other methodology currently available for the purpose of destroying PCBs. The method or combination of methods which prove most effective in the destruction of PCBs and which have the least risk of environmental damage should then become the focus of the guidelines. The remainder of the Association's response concerns itself with the incineration proposal outlined in the discussion paper.

With respect to the criteria which are to be used to determine whether or not any given facility is operating safely, the discussion paper emphasized "impingement" criteria only. This is a measure of the concentration of PCBs in a given quantity of air at a given point in time. The concentration of PCBs at a point of impingement is subject to several factors, such as air velocity, inversion, air temperature and gas temperature. Although Appendix I of the discussion paper indicates a maximum allowable stack emission, AMO believes that this should be given more prominence in any guidelines published by the Ministry. The general public will be better able to relate to a maximum stack emission figure than to "PCB concentrations at a point of impingement determined via the appropriate dispersion calculation/mathematical model method."

For the purpose of monitoring the operation of the facility it is imperative that the Ministry of the Environment define in detail what is expected of a proponent in terms of sampling, testing, recording, maintenance and reporting to both the Ministry and the local municipality. More important, the Ministry must insure that the monitoring procedures are defined in terms that will be comprehended by those responsible for monitoring the operation of the facility. The details of the monitoring process should be finalized during the environmental assessment process.

The Association agrees with the definition of a mobile destruction facility as being "equipment that is established and operated at a site for a period of no longer than 60 days". Further, AMO is in agreement with the use of the U.S. Environmental Protection Agency criteria for destruction efficiency and ambient air quality, and with the provisions outlined for minimizing leakage, spillage and vapour losses when handling the PCBs,

as outlined in the discussion paper. (The U.S. E.P.A. criteria require that the facility operate at an efficiency level which will result in combustion of 99.9% of the PCB liquid destroying 99.999% of the PCBs.)

The discussion paper compares mobile PCB destruction facilities to portable asphalt batching plants to establish that a precedent does exist for passing a regulation which would provide an alternative to site specific environmental approvals. The Association believes that this could give the public a false impression as to the degree of control placed on the operation of such a facility and the effectiveness of the facility in the destruction of PCBs. Portable asphalt plants can often be observed operating in a manner that technically is not permitted, especially during morning start up. As such, this comparison may cause unnecessary public concern.

2.2 Facility Siting

The Association supports the provision in the discussion paper which would require that candidate sites for locating any mobile facility be subject to review by the local community.

The discussion paper indicates that candidate sites should be industrially or commercially zoned. The Association supports the use of industrially zoned land for the location of such facilities but believes that most commercial areas would not be appropriate locations since by their nature they tend to be centres of activity with large "populations" for a portion of each day.

A distance of 200 metres is identified as a minimum separation distance from sensitive areas. The Association believes this minimum distance should be extended to 300 metres. This is approximately 1000 feet and, from a very humanistic point of view, it gives the average person a more comfortable visual distance between them and the mobile destruction unit.

The discussion paper suggests that the facility be limited to the treatment of PCB wastes from within the municipality in which the facility is sited. However, the Ministry's paper does provide for a single site to serve several municipalities as an

alternative where municipalities can reach agreement. The Association believes that sites capable of servicing more than a single municipality should be chosen. This would reduce the time and expense necessary for site selection and facility set up and could result in more efficient operation of the equipment and better site preparation.

With respect to public participation, the discussion paper would require a proponent to discuss candidate sites with municipal council and administrative staff and local community groups, conduct a public information program, including open houses, and establish a citizens' working group to monitor the operation of the facility and site restoration.

The Association concurs with the public participation process as outlined in the discussion paper but suggests that the consultation and liaison activities be co-ordinated through the municipality so as to reduce conflicts and minimize the duplication of administrative matters. Also, the monitoring of the operation of the facility and the restoration of the site should be funded by the Ministry of the Environment.

2.3 Facility Operation

With respect to materials handling, the discussion paper describes measures for the storage of PCBs at the facility site, including a maximum volume of PCB wastes which would be allowed at the site at any point in time, the use and re-use of drums carried to the site and the transfer of liquids on site, including the type of equipment to be used and the monitoring of the equipment operation. This section of the discussion paper also suggests that the proponent be required to submit to the Ministry a "materials flow diagram" which would outline the movement of wastes within the facility and a report on the specifications for the materials to be used in the construction of the facility.

The Association believes that the measures outlined in the discussion paper for the handling of materials on site are appropriate with the following exceptions:

- the PCB liquids should be transferred by air pressure rather than pumps. This would eliminate pump gland leakage and would allow for a more thorough emptying of PCB containers.

- all empty containers used for PCBs should be tested for residual PCBs and then crushed and disposed of in a secure landfill in accordance with Provincial and Federal PCB waste management guidelines.

- valves should be made of steel, stainless steel or a plastic composition that would be impervious to hydrocarbon solvents. Brass valves may be subject to corrosion from the low PH value of some waste oils and this could result in premature valve failure and subsequent leakage.

- each municipality in which the facility is located should also receive a copy of the materials flow diagram and the specifications for the materials to be used in the construction of the facility.

The discussion paper states that appropriate measures should be taken to avoid direct skin contact with PCB wastes and that all occupational health and safety measures, including exposure guidelines, protective equipment and clothing, engineering controls, hygiene practices, monitoring of exposure and medical surveillance of workers, should be reviewed with the Industrial Health and Safety Branch of the Ministry of Labour. The Association concurs with these provisions as they relate to the occupational health and safety of employees.

The discussion paper indicates that a clearly-defined procedure must be established for on site emergencies and for this purpose reference should be made to the Province of Ontario Plan for Spills of Oil and Hazardous Materials. The Association asks that each municipality in which the mobile facility is to be located be provided with a copy of this publication by the Ministry. The discussion paper also outlines general steps which should be followed in the event of a spill and which absorbent materials should be used. It suggests further that "never-to-be exceeded" control parameters be established which would identify situations requiring immediate shut-down of the facility.

With respect to security the discussion paper suggests that all public access to the facility be restricted, that the facility site be fenced (temporarily) and lighted and that 24 hour security be provided.

AMO agrees, in principle, with the proposals outlined in the discussion paper related to security and contingency plans provided these measures are defined in much greater detail during the environmental assessment process.

SUMMARY OF RECOMMENDATIONS

1. That a full environmental assessment be undertaken to establish the type of mobile facility and the methodology to be used in the destruction of PCB wastes, to develop a set of standards for the operation of the facility and to define a set of guidelines for the siting of the mobile facility.

2. That all available technologies be examined during the environmental assessment process to determine which method or combination of methods is most effective in the destruction of PCB wastes and has the least risk of environmental damage associated with it.

3. That the details of the monitoring process, including the proponents' responsibilities with respect to sampling, testing, recording, maintenance and reporting, be defined during the environmental assessment process.

4. That candidate sites for mobile PCB destruction facilities be limited to land zoned for industrial purposes.

5. That the minimum separation distance from sensitive population areas, as defined in the report and including commercial areas, be 300 metres.

6. That candidate sites for mobile PCB destruction facilities be chosen based on their ability to service more than one local municipality.

7. That all public participation and liaison activities be co-ordinated through the municipality.

8. That the Ministry of the Environment be responsible for funding the monitoring of the operation of the mobile PCB destruction facility and the restoration of the site.

9. That air pressure rather than pumps be used to transfer PCB liquids so as to eliminate leakage and allow for a more thorough emptying of containers.

10. That all empty containers be properly tested and disposed of in accordance with Provincial and Federal waste management guidelines.

11. That all valves used in the facility be made of steel, stainless steel or a plastic composition that would be impervious to hydrocarbon solvents.

12. That each municipality in which a mobile PCB destruction facility is to be located receive a copy of the "materials flow diagram" and the specifications for the materials to be used in the construction of the facility.

13. That each municipality in which a mobile PCB destruction facility is located be provided with a copy of the Province of Ontario Plan for Spills of Oil and Hazardous Materials by the Ministry of the Environment.

14. That the details of the requirements of the proponent with respect to security and contingency plans be determined during the environmental assessment process.

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